

## Bid Spec

### **1.0 Description**

Network camera should be of fixed type. The network camera shall have an ultra long zoom lens. Camera should have motion detection built-in. Network camera should be capable of receiving power and data through a single Ethernet cable (PoE). The network camera should be VGA resolution and have Motion-JPEG compression at up to 30 frames per second. The camera shall have simultaneous video distribution in various frame sizes. Network camera shall have a motorized IR cut filter. Network camera shall have 10 zoom presets. Camera should have two-way audio.

### **2.0 Bid Specification**

#### Technology:

- a. The network camera shall use a genuine Canon long zoom lens with a 26X optical zoom and an additional 12X digital zoom.
- b. Network camera shall be powered via PoE and be in compliance with IEEE802.3af standard.
- c. Video compression should be MJPEG.
- d. Network camera should have three selectable resolutions of 640 x 480, 320 x 240, and 160 x 120 and simultaneous distribution of all three resolutions.
- e. Camera should have Day/Night switching mode with motorized IR cut filter.
- f. Shall have two-way audio, G.711  $\mu$ -law (8 kHz PCM - 64kbps).
- g. Shall have 10 presets for different zoom views to be saved.
- h. Should allow up to 50 users to access network camera simultaneously.

#### Image Adjustments

- a. Network camera shall have auto focus and manual focus.
- b. Network camera shall have auto white balance and manual white balance controls.
- c. Network camera shall have manual settings for image quality.
- d. Network camera shall have auto exposure and manual exposure controls.
- e. Network camera shall have shade correction software to brighten dark areas without changing the already bright areas.

#### User Friendly Features:

- a. Network camera shall have auto MAC address detection upon plugging in power.
- b. Network camera shall be powered over the Ethernet to allow for cheaper installations.
- c. Network camera shall allow still images, audio, schedule, date, time, presets, and panorama settings to be stored on board camera.

#### Inputs and Outputs:

- a. Network camera shall have 1 LAN port (RJ45, 100Base-TX/10Base-T auto negotiation)
- b. Network camera shall have Audio IN/Out (using optional expansion unit): 3.5 monaural\* mini-jacks. IN: Electret condenser monaural microphone input, plug-in power (3.3 V). OUT: line-level output.
- c. Network camera shall have Video IN/OUT: composite video - BNC terminal, 1 each.\*
- d. Network camera shall have External device I/O: input x 2, output x 3.\*
- e. Network camera shall have port for optional AC Adapter.
- f. Network camera shall have RS-232C (for service use only)\*.

\* Using optional expansion unit.

#### Ratings:

- a. The network camera shall have power input of 100V to 240V/ 50/60Hz (using AC Adapter).
- b. The network camera shall use Power over Ethernet in compliance with IEEE802.3af standard.
- c. Network camera shall have power consumption of Max. approx. 10W or less.

- d. Network camera shall not weigh more than 1.17 lbs.
- e. Network camera shall not have larger dimensions than 2.60 inches x 5.28 inches x 3.81 inches.
- f. Network camera shall be operated in an environment of 0° to 40°C and humidity of 20 to 85% RH.

Warranty

- a. Network camera shall have a 1 year limited warranty parts and labor.

## Specifications

Video Signal	Conforms to NTSC
Image Sensor	¼-inch CCD (primary color filter)
Number of Pixels	680,000 (effective 340,000)
Scanning Method	2 : 1 interlaced
Min. Subject Illumination	Normal mode: 1 lux (at 1/30 sec.) / Night mode: 0 lux
Imaging Modes	Day mode / Night mode
Focusing	Auto/Manual Wide-angle: 0.01 m (0.03 ft.) to inf.; Telephoto: 1.6 m (5.25ft.) to inf. (In night mode, Wide-angle: 0.02 m (0.07 ft.) to inf.; Telephoto: 2.3 m (7.55ft.) to inf.)
Aperture	Auto iris servo system
Lens	Focal length 3.5 to 91.0 mm, f/1.6 to f/4.0, 26 × power zoom (shooting at infinity)
Operating system	Linux
Server	HTTP, FTP, Webview Livescope
Log Management	Syslog format
Infrared Cut Filter	Power-driven insertion / removal (Day mode / Night mode)
White Balance	TTL system: Auto
Protocols	HTTP, DHCP, WV-HTTP (from Canon)
Video Compression Method	Motion-JPEG compression (movie) JPEG (still image)
Video Compression Rate	NTSC: 0.1fps-30fps
Audio Compression Method	G.711μ-law(64kbps) full duplex
Output Video Size	160 x 120, 320 x 240, 640 x 480
Camera Control	zoom, brightness, shutter speed, focus speed, control time restriction
Connection Controls	Access Control (with password), video connection time, service period, number of concurrent connections (max. 50)
Network	Network: LAN x 1 (RJ45, 100Base-TX / 10Base-T auto-negotiation)
Multi-Connector	Video IN/OUT: NTSC/PAL composite video - BNC terminal (1 each)* Audio IN/OUT: monaural, mini-jack (1)* IN: Electret condenser monaural microphone input, plug-in power (3.3 V) OUT: Line-level output External Device I/O: Input = 2, Output = 3* RS-232C (for service use only)* *Connector for using the Multi-Terminal Module (sold separately)
Dimensions	2.60 × 5.28 × 3.81 in. (W × D × H)
Weight	Approx. 1.17 lb
Operating Environment	Temperature= 0 - 40°C, humidity 20 - 85% RH (condensation free)
Power	AC adapter for 100VAC to 240 VAC or IEEE 802.3af compliant
Power consumption	Max: Approx. 10W or less